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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Adopt Biomethane Standards and Requirements, Pipeline Open Access Rules, and Related Enforcement Provisions.

Rulemaking 13-02-008

ASSIGNED COMMISSIONER'S AMENDED SCOPING MEMO AND RULING

This amended scoping memo and ruling sets forth the category, issues to be addressed, and schedule of the proceeding pursuant to Public Utilities (Pub. Util.) Code § 1701.1 and Article 7 of the Commission's Rules of Practice and Procedure.

1. Procedural Background

The California Public Utilities Commission (Commission) established Rulemaking (R.) 13-02-008, to consider and adopt biomethane standards and requirements, pipeline open access rules, and related enforcement provisions pursuant to key legislative action. First, Assembly Bill (AB) 1900 amended and added several code sections to the Public Utilities Code pertaining to biogas and biomethane. As part of AB 1900, Health and Safety Code section 25421 was added into law, and required the Commission to adopt standards that specify the concentration of allowable constituents of concern in biomethane that can be injected into a common carrier pipeline. This legislation also required the Commission to adopt monitoring, testing, reporting, and recordkeeping protocols to ensure the safety and integrity of pipelines and pipeline facilities. Thus, pursuant to AB 1900, this Commission, with the assistance of the California Air Resources Board (CARB) and the Office of Environmental Health

Hazard Assessment (OEHHA), as well as parties to this rulemaking, took steps to allow the injection of biomethane gas into the natural gas pipeline systems of California's gas utilities. These efforts resulted in the adoption of Commission Decision (D.) 14-01-034.

D.14-01-034 established concentration standards for 17 constituents of concern¹ found in biomethane. One of the 17 constituents of concern is siloxane. Siloxane² poses a "risk of equipment damage and catalyst poisoning."³ Thus, D.14-01-034 adopted monitoring, testing, reporting, and recordkeeping requirements for biomethane injected into the natural gas utilities' pipelines. Importantly, adherence to these standards and protocols ensures that human health, and the integrity and safety of the gas pipelines and pipeline facilities, are protected.

Following D.14-01-034, the Commission, in D.15-06-029, addressed cost issues associated with meeting the biomethane standards and requirements adopted in D.14-01-034. In D.15-06-029, the Commission also adopted a

¹ CARB and OEHHA identified the following 12 constituents of concern that can potentially be present in biomethane: (1) antimony; (2) copper; (3) p-Dichlorobenzene; (4) ethylbenzene; (5) hydrogen sulfide; (6) lead; (7) methacrolein; (8) n-Nitroso-di-n-propylamine; (9) mercaptans; (10) toluene; and (11) vinyl chloride; and (12) arsenic. These twelve constituents were deemed to have environmental or human health impacts and maximum permissible concentrations were accounted for. The natural gas utilities identified, and the CPUC adopted, the following five constituents which pose a risk of equipment damage and catalyst poisoning: (1) siloxanes; (2) ammonia; (3) hydrogen; (4) mercury; and (5) biologicals.

² According to the California Council on Science and Technology, "Siloxanes are manmade compounds, and there is no known biological process that forms them: Siloxanes are used in the manufacture of personal hygiene, health care, and industrial products. As a consequence of their widespread use, siloxanes are found in wastewater and solid waste deposited in landfills." California Council on Science and Technology, *Biomethane in California Common Carrier Pipelines: Assessing Heating Value and Maximum Siloxanes Specifications* at 23.

³ *Id.* at 23.

biomethane monetary incentive program designed to encourage biomethane producers to design, construct, and safely operate projects that interconnect and inject biomethane into California's natural gas utilities' pipeline systems. Under the adopted monetary incentive program, each biomethane project built before June 11, 2020 can receive up to \$1.5 million upon the successful interconnection and operation of the facility. The program funds total \$40 million.

Then, in 2016, the California Legislature enacted two biomethane related bills that affect the monetary incentive program adopted in D.15-06-029. Senate Bill (SB) 840 added Public Utilities Code section 784.1, requesting that the California Council on Science and Technology (CCST) "undertake and complete a study analyzing the regional and gas corporation specific issues relating to minimum heating value and maximum siloxane specifications for biomethane before it can be injected into common carrier gas pipelines, including those specifications adopted in Section 4.4.3.3 and 4.4.4 of Commission Decision 14-01-034." Other sections of Public Utilities Code section 784.1 require "each gas corporation operating common carrier pipelines in California to proportionately contribute to the expense to undertake the study..." and when undertaken and completed, "within six months of [the study's] completion, the commission shall reevaluate its requirements and standards adopted pursuant to section 25421 of the Health and Safety Code... and if appropriate, change those requirements and standards, giving due deference to the conclusions and recommendations made in the study by CCST." D.16-12-043 ordered this proceeding to remain open, to consider the results of the CCST study.

The second bill, AB 2313, changes the monetary incentive program adopted in D.15-06-029, adding section 399.19 and 784.2 to the Public Utilities Code. Section 399.19 extends the monetary incentive program to

December 31, 2021, and increases the incentive amounts for non-dairy cluster biomethane projects to \$3 million from \$1.5 million, and for dairy cluster biomethane projects, increases the incentive amounts to \$5 million from \$1.5 million. The Commission implemented these changes in D.16-12-043.

Furthermore, Public Utilities Code section 784.2 provides that before the funds made available pursuant to the monetary incentive program are exhausted, and before the expiration of the program, the Commission, “shall consider options to further the goals of section 399.24, including consideration of whether to allow recovery in rates of the costs of investments” as stipulated in subdivisions (a), (b), and (c) of the pertinent code section.

The Commission contracted with CCST to conduct the study called for by section 784.1. CCST completed its study and presented its findings, conclusions, and recommendations in a public workshop on June 11, 2018 held at the Commission’s San Francisco headquarters. CCST made the following key recommendations:

- 1. Heating Value Specification Number:** CCST recommends the Commission examine the option of allowing biomethane injection with a heating value as low as 970 British Thermal Unit (BTU)/Standard Cubic Feet (scf), provided the biomethane being injected satisfies the current Wobbe Number limits and all other requirements.
- 2. Maximum Siloxane Concentrations for Biomethane:** CCST states there is insufficient evidence available to determine whether the Commission’s maximum siloxane limit of 0.1 mg Silicon (Si)/Cubic Meter (m³) is too stringent or not stringent enough to meet safety requirements.

CCST made the following additional recommendations:

- 3. Research Program:** Support a comprehensive research program to understand operational, health, and safety consequences of various concentrations of siloxanes.

4. **Verification Regime:** Consider the development of a reduced and simplified verification regime for sources that are very unlikely to have siloxanes, such as dairies, agricultural waste, and forestry residues.
5. **ASTM International Process:** Monitor the ASTM International process to adopt and test a standard test for siloxanes.
6. **Use of ASTM International Process:** Use the learnings from the siloxane research and the ASTM International process to revisit the siloxane maximum standards once more complete information becomes available.
7. **State and Federal Subsidies:** State and Federal agencies should examine whether the substantial differences in incentives for various uses of biogas/biomethane are consistent with the State and Federal intentions.

Therefore, pursuant to section 784.1 and consistent with D.14-01-034, D.15-06-029, and D.16-12-043, the Commission will now – in light of the CCST study – initiate its reevaluation of the current requirements and standards for biomethane injection into common carrier pipelines. Below, the issues and schedule of the proceeding are set forth in this scoping memo.

2. Issues

The issues to be determined are:

1. **Heating Value Specification Number:** Whether the Commission should allow biomethane injection with a heating value as low as 970 BTU/scf, provided the biomethane being injected satisfies the current Wobbe Number limits and all other requirements?
2. **Maximum Siloxane Concentrations for Biomethane:** Whether, given that CCST reports there is insufficient evidence available to determine whether the Commission's maximum siloxane limit of 0.1 mg Si/m³ is too stringent or not stringent enough to meet safety requirements, this requirement should remain unchanged?
3. **Reduced Verification Requirements:** The CCST Study recommends considering a reduced and simplified verification

regime to avoid unnecessarily encumbering sources that do not produce siloxanes. (Summary Report, p.12-13). Should the Commission approve reduced and simplified verification requirements for biomethane from dairies, agricultural waste, and/or forestry residues? If so, what requirements should apply?

4. **Waiver Process for Blending in Certain Locations:** The CCST study concluded that blending of upgraded biogas with natural gas in or at the pipeline might allow safe pipeline movement of upgraded biogas that does not meet all specifications, but only under very specific conditions. (Summary Report, p.15) Should there be a process for biomethane producers to request utility approval of a lower heating value standard at locations where specific conditions (volume of injection, location of injection, location of end uses, volume throughput, customer usage, configuration of local pipeline system, etc.) ensure that adequate blending will occur by the time the gas arrives at end-use equipment? If so, what should that process consist of?
5. **Laboratories:** The CCST study notes that there is currently no standardized measurement protocol for Siloxane. It states: "Several testing laboratories claim detection limits of 0.1mg Siloxane/m³ or lower. However, we have not been able to independently test these claims." (Summary Report, p.13). Are there laboratories that can reliably and accurately detect siloxanes at a concentration of 0.1mg/m³ or lower? What is the identity and location of such laboratories, if any?
6. **Injection of renewable methane:** Should the biomethane injection standards also apply for pipeline injection of renewable methane? Should any criteria be eliminated or any verification requirements be changed, and how?
7. **Other recommendations:** What action should the Commission take, if any, with respect to CCST's Recommendations Number 3, 5, 6, and 7?
8. **Modifications to current CPUC regulations:** What other modifications or changes, if any, should be made to current CPUC regulations in light of CCST's study?

Additionally, parties shall also consider the following issue:

- 9. Monetary Incentive Programs:** Should the Commission extend the monetary incentive programs adopted in D.15-06-029, and as stipulated in section 399.19 and 784.2 of the Public Utilities Code, beyond 2021?

Pursuant to the schedule below, parties shall file comments on the merits of the questions presented above, in Section 2 of this Scoping Memo.

3. Other Considerations

In accordance with Section 399.24 and with Executive Order B-48-18 issued on January 26, 2018, it is my future intention to consider issues within this, or a successor proceeding, that pertain to the safe, cost-effective development of other renewable gases, such as renewable hydrogen.

Finally, I believe that in order to promote development of a statewide biomethane industry across all investor-owned utility territories and reduce barriers to entry, it is important to establish a standardized utility biomethane interconnection tariff and standardized interconnection pro forma forms for the use of biomethane projects across California.

In furtherance of Public Utilities Code Section 399.24, I direct the utilities to jointly file a proposed standard biomethane interconnection tariff and proposed standard pro forma interconnection forms within 90 days of this scoping memo. Following the joint filing of the proposed standard interconnection tariff and pro forma interconnection forms, Energy Division will schedule a workshop to facilitate development of a standard tariff, including discussion of the following topics:

1. Workability: is a joint utility interconnection tariff for biomethane workable?
 - a. If not, what needs to be utility specific and why?

2. Safety: what are the safety risks, safety considerations, potential pipeline integrity impacts, and mitigation measures the Commission must consider in connection with a joint utility biomethane interconnection tariff?
3. Costs: What ratepayer cost impacts must the Commission consider in connection with a joint utility biomethane interconnection tariff?
4. Standards: to ensure continuity of the safety and integrity of the natural gas pipeline system, what standards should the Commission consider for a joint utility biomethane interconnection tariff?
5. Technical Issues: What technical issues should be considered to ensure timely, non-discriminatory, cost-effective and transparent biomethane interconnection?
6. Planning, studies, and workshops: what planning and/or studies should be performed or would be involved to tender a joint biomethane interconnection tariff?
7. Coordination: what interagency coordination would be required, if any?
8. Should the standard tariff also provide for interconnection of facilities that produce renewable methane?
9. Other: what other issues should be considered?

Following the workshop on the proposed joint utility interconnection tariff and pro forma forms, I or the assigned Administrative Law Judge (ALJ) will issue a subsequent ruling establishing a further procedural schedule for the development of a standard biomethane interconnection tariff.

4. Need for Evidentiary Hearing

The need for evidentiary hearings is not anticipated at this time.

5. Schedule

The following schedule is adopted here and may be modified by the ALJ as required to promote the efficient and fair resolution of the proceeding:

EVENT	DATE
Comments on issues stipulated in Section 2	July 27, 2018
Reply Comments on issues stipulated in Section 2	August 31, 2018
ALJ Ruling Requesting More Information from parties	July-August
Joint Utility Interconnection Tariff & Pro Forma Forms	90 days from date of scoping memo
Energy Division Workshop on Proposed Standard Utility Interconnection Tariff & Pro Forma Forms	TBD
Record Submitted on scoping issues	August 31, 2018
Proposed decision	90 days from submission of record

The proceeding will stand submitted upon record submission date, unless the ALJ requires further information. Based on the schedule, this proceeding will be resolved within 12 months.

6. Category of Proceeding/*Ex Parte* Restrictions

This ruling confirms the Commission's determinations that this is a quasi-legislative proceeding. Accordingly, ex parte communications are permitted without restriction or reporting requirement pursuant to Article 8 of the Commission's Rules of Practice and Procedure.

7. Oral Argument

Unless comment is waived pursuant to Rule 14.6(c)(2) for granting the uncontested relief requested, motions for oral argument shall be filed no later than the submission date.

8. Intervenor Compensation

Pursuant to Pub. Util. Code § 1804(a)(1), a customer who intends to seek an award of compensation must file and serve a notice of intent to claim compensation 30 days of the date of this Scoping Memo.

9. Public Advisor

Any person interested in participating in this proceeding who is unfamiliar with the Commission's procedures or has questions about the electronic filing procedures is encouraged to obtain more information at <http://consumers.cpuc.ca.gov/pao> or contact the Commission's Public Advisor at 866-849-8390 or 415-703-2074 or 866-836-7825 (TTY), or send an e-mail to public.advisor@cpuc.ca.gov.

10. Service of Documents on Commissioners and Their Personal Advisors

Rule 1.10 requires only electronic service on any person on the official service list, other than the ALJ.

When serving documents on Commissioners or their personal advisors, whether or not they are on the official service list, parties must only provide electronic service. Parties must NOT send hard copies of documents to Commissioners or their personal advisors unless specifically instructed to do so.

11. Assignment of Proceeding

Clifford Rechtschaffen is the assigned commissioner and Colin Rizzo is the assigned Administrative Law Judge for the proceeding.

IT IS RULED that:

1. The scope of this proceeding is described above.
2. The schedule of this proceeding is as set forth above.
3. Evidentiary hearings are not needed at this time.

4. Within 90 days from this scoping ruling, Pacific Gas and Electric Company, Southern California Gas Company, and San Diego Gas & Electric Company shall jointly file a proposal for a standard biomethane interconnection tariff and pro forma forms.

5. Pursuant to Pub. Util. Code § 1804(a)(1), a customer who intends to seek an award of compensation must file and serve a notice of intent to claim compensation 30 days of the date of this Scoping Memo.

6. The category of the proceeding is quasi-legislative.

Dated July 5, 2018, at San Francisco, California.

/s/ CLIFFORD RECHTSCHAFFEN

Clifford Rechtschaffen
Assigned Commissioner